

### CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051 Phone: (860) 827-2935 Fax: (860) 827-2950 E-Mail: siting.council@ct.gov Internet: ct.gov/csc

November 7, 2007

TO:

Parties and Intervenors

FROM:

S. Derek Phelps, Executive Director

RE:

DOCKET NO. 331 - Sprint Nextel Corporation application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and operation of a telecommunications facility located at 836 Foxon Road, East

Haven, Connecticut.

By its Decision and Order dated November 5, 2007, the Connecticut Siting Council granted a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and operation of a telecommunications facility located at 836 Foxon Road, East Haven, Connecticut.

Enclosed are the Council's Findings of Fact, Opinion, and Decision and Order.

SDP/CDM/cm

Enclosures (3)

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# CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051 Phone: (860) 827-2935 Fax: (860) 827-2950 E-Mail: siting.council@ct.gov Internet: ct.gov/csc

November 7, 2007

Thomas J. Regan, Esq. Brown Rudnick Berlack Israels LLP CityPlace I, 38<sup>th</sup> Floor 185 Asylum Street Hartford, CT 06103-3402

RE: **DOCKET NO. 331** - Sprint Nextel Corporation application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and operation of a telecommunications facility located at 836 Foxon Road, East Haven, Connecticut.

Dear Atty. Regan:

By its Decision and Order dated November 5, 2007, the Connecticut Siting Council (Council) granted a Certificate of Environmental Compatibility and Public Need (Certificate) for the construction, maintenance and operation of a telecommunications facility located at 836 Foxon Road, East Haven, Connecticut.

Enclosed are the Council's Certificate, Findings of Fact, Opinion, and Decision and Order.

S. Derek Phelps

Executive Director

SDP/CDM/cm

Enclosures (4)





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#### CERTIFICATE

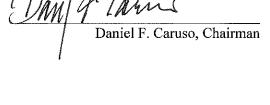
OF

# ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED DOCKET NO. 331

Pursuant to General Statutes § 16-50k, as amended, the Connecticut Siting Council hereby issues a Certificate of Environmental Compatibility and Public Need to Sprint Nextel Corporation for the construction, maintenance and operation of a telecommunications facility located at 836 Foxon Road, East Haven, Connecticut. This Certificate is issued in accordance with and subject to the terms and conditions set forth in the Decision and Order of the Council on November 5, 2007.

By order of the Council,

November 5, 2007





<b>DOCKET NO. 331</b> - Sprint Nextel Corporation application for a	}.	Connecticut
Certificate of Environmental Compatibility and Public Need for		
the construction, maintenance and operation of a telecommunications facility located at 836 Foxon Road, East	}	Siting
Haven, Connecticut.	}	Council

November 5, 2007

#### Findings of Fact

#### Introduction

- 1. Pursuant to Chapter 277a, Sections 16-50g et seq. of the Connecticut General Statutes (CGS), as amended, and Section 16-50j-1 et. seq. of the Regulations of Connecticut State Agencies (RCSA), Sprint Nextel Corporation (Sprint) applied to the Connecticut Siting Council (Council) on March 27, 2007 for the construction, operation, and maintenance of a telecommunications facility to be located at 836 Foxon Road in the Town of East Haven, Connecticut. (Sprint 1, p. 1)
- 2. Sprint is a Delaware corporation with its principal business offices located at One International Boulevard, Suite 800, Mahwah, New Jersey. (Sprint 1, p. 1)
- 3. The party in this proceeding is the applicant. Cellco Partnership d/b/a Verizon Wireless (Cellco) and Omnipoint Communications, Inc. (T-Mobile) were intervenors. (Transcript, August 14, 2007, 3:05 p.m. [Tr. 1], pp. 5-6)
- 4. The purpose of the proposed facility is to cover a gap in Sprint's wireless service along Foxon Road (Route 80) and in the surrounding area of East Haven and to provide capacity relief for Sprint's existing sites in this area. (Sprint 1, p. 5; Tr. 1, p. 15)
- 5. Pursuant to CGS § 16-50m, the Council, after giving due notice thereof, held a public hearing on August 14, 2007, beginning at 3:05 p.m. and continuing at 7:00 p.m. at the East Haven Senior Center, 91 Taylor Avenue, East Haven, Connecticut. (Tr. 1, p. 3 ff.)
- 6. The Council and its staff conducted an inspection of the proposed site on August 14, 2007, beginning at 2:00 p.m. On the day of the field inspection, the applicant flew a balloon beginning at approximately 7:50 a.m. to simulate the height of the proposed tower. Conditions for the balloon flight were favorable until shortly before 12:00 p.m. At this time winds increased to 10 to 15 miles per hour. The applicant flew the balloon until approximately 6:00 p.m. (Tr. 1, p. 12)
- 7. Pursuant to CGS § 16-50*l*(b), notice of the applicant's intent to submit this application was published on February 13 and 15, 2007 in the New Haven Register and the East Haven Courier on April 6 and April 13, 2006. (Sprint 1, p. 4)

- 8. In accordance with CGS § 16-50*l*(b), Sprint sent notices of its intent to file an application with the Council to each person appearing of record as owner of property abutting the property on which the site is located on April 6, 2006. (Sprint 1, p. 4, Tab 4)
- 9. As of September 21, 2006, return receipts had not been received from two of the abutters: Nutmeg Housing Development Corp. and Rashid and Rabiq Khan. Sprint sent another notification to these abutters via first class mail, no return receipt requested. The second notice to Nutmeg Housing was returned. Sprint obtained a different mailing address from the East Haven Assessor's Office and sent another notice to this second address. (Sprint 1, pp. 4-5)
- 10. Sprint posted a sign on the property notifying the general public of its pending application on July 26, 2007. (Tr. 1, p. 12)
- 11. Pursuant to CGS § 16-50*l* (b), Sprint provided notice to all federal, state and local officials and agencies listed therein. (Sprint 1, Tab 5)

#### **State Agency Comments**

- 12. Pursuant to CGS § 16-50*l*, the Council solicited comments on Sprint's application from the following state departments and agencies: Department of Environmental Protection, Department of Public Health, Council on Environmental Quality, Department of Public Utility Control, Office of Policy and Management, Department of Economic and Community Development, and the Department of Transportation. The Council's letters requesting comments were sent on July 2, 2007 and on August 15, 2007. (CSC Hearing Package dated July 2, 2007; CSC Letter to State Department Heads dated August 15, 2007)
- 13. The Connecticut Department of Public Health (DPH) responded to the Council's solicitation with no comments. (DPH Letter dated July 17, 2007)
- 14. The Connecticut Department of Transportation (ConnDOT) responded to the Council's solicitation with no comment. (ConnDOT Letter dated August 6, 2007)
- 15. No comments were received from any other state agency. (Record)

#### **Municipal Consultation**

- 16. Sprint notified the Mayor of East Haven, Joseph Maturo, of its intent to file an application with the Council on January 11, 2006. Sprint's notification included a package of materials that included radio-frequency engineering information, a site plan, a viewshed analysis report, and a National Environmental Policy Act (NEPA) screening report. (Sprint 1, p. 9)
- 17. Issues with the due diligence undertaken by two different sets of consultants led Sprint to take additional time to review the collected information on this site. This additional time taken by Sprint led to a longer than normal interval between the time of its municipal consultation and the submittal of its application to the Council. (Sprint 2, Response 3)

- 18. Because the proposed facility is within 2,500 feet of the New Haven municipal boundary, Sprint also notified New Haven's mayor, John DeStefano, Jr., of its plans to apply to the Council. (Sprint 1, p. 9)
- 19. Neither municipality requested a meeting with Sprint to discuss its plans or asked Sprint to attend any public hearings to explain its proposal. (Sprint 1, pp. 9-10)

#### Public Need for Service

- 20. The United States Congress, in the Telecommunications Act of 1996, determined that there exists a national need for wireless services. This Act also sought to foster competition in the marketplace and to prohibit the discrimination against functionally equivalent wireless carriers. (Sprint 1, p. 5)
- 21. The Telecommunications Act of 1996 prohibits any state or local agency from regulating telecommunications towers on the basis of the environmental effects of radio frequency emissions to the extent that such towers and equipment comply with Federal Communications Commission's (FCC) regulations concerning such emissions. This Act also blocks the Council from prohibiting or acting with the effect of prohibiting the provision of personal wireless service. (Council Administrative Notice, Telecommunications Act of 1996)
- 22. Sprint's facility would comply with the requirements of the Wireless Communications and Safety Act of 1999, otherwise known as the E911 Act. (Sprint 1, p. 7)
- 23. Sprint would allow the Town of East Haven to use its proposed tower for public safety purposes at no charge. (Sprint 1, p. 6)

#### **Site Selection**

- 24. Sprint began looking for a site in this vicinity on May 3, 2004. (Sprint 2, Response 1)
- 25. Sprint's search ring encompasses an area of between a quarter to a third of a mile on either side of Foxon Road from the New Haven city line to the intersection of Foxon Road and Gay Street. (Sprint 1, Tab 6)
- 26. The number of potential sites within the search ring was limited because most properties in this area are small residential or commercial parcels. Two of the largest commercial properties, Fox Haven Plaza and CVS Plaza, do not have adequate space to accommodate the proposed facility. (Sprint 1, p. 8)
- 27. None of the commercial buildings within the search ring were tall enough to utilize as an antenna location. (Sprint 1, p. 8)

- 28. Sprint investigated two vacant parcels as part of its site search. The first parcel was near Fox Haven Plaza. Sprint concluded that this parcel was unsuitable because of wetland issues and it was too far outside the search ring. The second parcel was at a high elevation but is surrounded on all sides by residential parcels with the only access point between two houses. (Sprint 1, pp. 8-9)
- 29. Sprint also investigated an area near an existing gravel pit south of Foxon Road and found that a site at this location did not provide adequate coverage along Foxon Road and would cause interference with a site in New Haven. (Sprint 1, p. 9)
- 30. The extent of Sprint's existing coverage gap is such that other technologies such as repeaters and microcells would not be viable options to provide satisfactory service. (Sprint 1, p. 8)

#### **Site Description**

#### **Application Site**

- 31. The facility proposed in Sprint's application would be on a 3.01 acre parcel located at 836 Foxon Road. The property is owned by Planet Fitness Park, LLC and is currently occupied by a health club, Planet Fitness. The property is located on the south side of Foxon Road approximately halfway between Russo Avenue and Mill Avenue. (Sprint 1, p. 10; Record)
- 32. The Planet Fitness property is located in an R-2 zoning district, a designation primarily for single family homes on small lots served by public water and sewer systems. Wireless telecommunications sites are permitted in East Haven's residential zones with a Special Exception approval. (Sprint bulk filing: East Haven Zoning Regulations)
- 33. Land use in the vicinity of the proposed facility is comprised mainly of medium-density residential development to the north and south of Foxon Road and some commercial development along Foxon Road. Topography in the area is generally characterized by rolling hills that range in elevation from 20 feet above mean sea level (amsl) to 290 feet amsl. (Sprint 1, p. 10)
- 34. Presently AT&T utilizes this property. Antennas are mounted to the building at approximately 30 feet above ground level, and a fenced equipment compound is located at the northeast corner of the building. (Sprint 1, Tab 8, drawing Z4; Tr. 1, p. 19; Tr. 2, p. 8)
- 35. Sprint's facility would be located along the east side of the Planet Fitness building adjacent to AT&T's compound. It would include a 20-foot by 20-foot enclosed compound within which Sprint would erect a 100-foot high flagpole tower. Sprint's base station equipment would consist of cabinets on a concrete pad. (Sprint 1, Tab 8)
- 36. Sprint chose a flagpole design for its tower at this location out of concern about its visibility in the surrounding area and the expressed preference of the property's owner at the time of its initial lease negotiations. (Tr. 1, p. 15 ff.)

- 37. Sprint did not plan to fly a flag from the flagpole tower since there is another flagpole that does fly a flag in the front of the building. (Tr. 1, p. 17)
- 38. Sprint's compound would not be large enough to accommodate additional carriers. (Sprint 2, Response 11)
- 39. Neither T-Mobile or Cellco have entered into a lease with the property owner for space to place their base station equipment. (Sprint 2, Response 12)
- 40. Cellco would require a lease area large enough to accommodate its standard equipment shelter, which measures 12 feet by 30 feet. (Tr. 1, p. 54)
- 41. The proposed tower would be located at 41° 19' 13.62" latitude and 72° 51' 33.74" longitude. The elevation at the tower's base would be 157 feet amsl. (Sprint 1, Tab 8)
- 42. Sprint would install three antennas, one per sector, at a centerline height of 97 feet above ground level (agl) within the proposed flagpole tower. (Sprint 1, p. 11; Tr. 1, p. 24)
- 43. T-Mobile would install three antennas at a centerline height of 87 feet agl inside the flagpole tower. (T-Mobile 1, A2, A11)
- 44. Cellco would install three dual band/dual pole antennas at a centerline height of 77 feet agl inside the proposed flagpole. (Cellco 1, Response 11)
- 45. The flagpole tower would be designed in accordance with the specifications of the American National Standards Institute's/Electronic Industries Association's Manual #222-F "Structural Standards for Steel Antenna Towers and Antenna Support Structures." (Sprint 1, p. 11)
- 46. Sprint's tower would be designed to accommodate a total of four antenna placements. (Tr. 1, pp. 17-18)
- 47. A flagpole tower designed for four antenna placements would have a top diameter of two and a half to three and a half feet and a bottom diameter of four to four and a half feet. (Tr. 1, p. 23)
- 48. Sprint's equipment compound would be enclosed by an eight-foot high vinyl stockade fence. (Sprint 2, Response 17)
- 49. The application's site plan shows that equipment compounds for additional carriers would be located adjacent to Sprint's compound along the same side of the building. A new door, recently cut into the wall of the Planet Fitness building, would require the location of these compounds to be adjusted to allow access to the door. (Tr. 1, pp. 13-14)
- 50. Power to Sprint's facility would be supplied from an existing transformer north of AT&T's compound and would run through AT&T's compound to Sprint's compound. (Sprint 1, p. 12)

- 51. Sprint would use a battery back-up system for use during power outages. This system could realistically be expected to supply power for six to eight hours. In the event of longer power outages, Sprint could bring a diesel generator to the site on a temporary basis. (Sprint 1, p. 12)
- 52. Cellco would use a diesel generator for back-up power. This generator, including fuel tank, is housed within the equipment building which acts as a tertiary containment system designed to accommodate 110 percent of the fuel capacity of the diesel system. (Tr. 1, pp. 52-53)
- 53. Vehicular access to the facility would be over the existing driveway and parking lot for Planet Fitness. (Sprint 1, p. 11)
- 54. The nearest residence to the proposed facility is located 141 feet to the south and is owned by Rashid and Rabiq Khan. (Sprint 2, Response 4)
- 55. There are approximately 130 residences located within 1,000 feet of the proposed facility. (Sprint 2, Response 5)
- 56. The tower's setback radius would encroach on property to the east by approximately 50 feet, which is the small strip of land between the Planet Fitness Park property and Fox Ridge Drive owned by Nutmeg Housing Development. (Sprint 2, Response 6)
- 57. Sprint would be willing to engineer a yield point in the flagpole tower to keep the setback radius within the host property. (Sprint 2, Response 7)
- 58. Development of this property for Sprint's facility would require a negligible amount of cut and fill. The only ground disturbance would be to install the equipment pad, tower foundation, and fence post installation. (Sprint 2, Response 8)
- 59. No blasting would be required to develop this site. (Sprint 2, Response 9)
- 60. The estimated cost of construction for this facility, not including carriers' antennas and support equipment, is:

Site work	\$30,500
Monopole	30,000
Electrical & Telephone	12,000
Foundation	23,500
Landscaping	2,000
Total costs	\$98,000

(Sprint 1, Tab 9)

#### Alternate Site

- 61. The property's landlord would be amenable to allowing Sprint to locate its facility in the front of the building where the existing flagpole is currently located. In this case, Sprint would replace the existing flagpole with its flagpole tower. (Transcript, August 14, 2007, 7:07 p.m. [Tr. 2], p. 21)
- 62. The ground elevation for Sprint's tower, if it were to be located where the existing flagpole is, would be 168 feet above mean sea level. (Sprint 1, Tab 8, Drawing Z2A)
- 63. If the flagpole tower were to be located in the front of the building where the existing flagpole is, Sprint could place the carriers' base station equipment in the back of the building or use parking space on the northwest corner of the building. (Tr. 2, p. 21)
- 64. Cables would be run from the tower base over the top of the building to connect with the base station equipment at the rear of the building. Sprint could install up to 200 feet of coaxial cable. (Tr. 1, p. 35; Tr. 2, p. 21)
- 65. A flagpole tower in the front of the building would fly a flag. (Tr. 2, p. 21)
- 66. The setback radius of a 100-foot flagpole tower located in front of the building where the existing flagpole is currently located would encroach on the adjacent property to the west by approximately 20 feet. (Sprint 1, Tab 8 Overall Site Layout)

#### **Environmental Considerations**

(Because the height of the proposed tower would be the same at either location and both the application and alternate sites are close to one another on the same property, the environmental facts apply to both locations.)

- 67. Sprint's proposed facility would have no effect on historic, architectural, or archaeological resources listed on or eligible for the National Register of Historic Places. The facility would also have no effect on properties of traditional cultural importance to Connecticut's Native American community. (Sprint 1, Tab 14: Letter from State Historic Preservation Officer)
- 68. There are no known extant populations of Federal or State Endangered, Threatened or Special Concern Species that occur near Sprint's proposed facility. (Sprint 1, Tab 11: Letter from Connecticut Department of Environmental Protection)
- 69. Developing this compound would not require cutting any mature trees. (Sprint 1, Tab 14: NEPA Screening Report)
- 70. The closest wetlands to the proposed site are approximately 1,500 feet to the northwest and 1,500 feet due south. (Sprint 2, Response 27)

- 71. Sprint has received a determination of no hazard to air navigation for its proposed facility. Its tower would not require marking or lighting. (Attachment to Sprint 2 FAA Determination of No Hazard to Air Navigation)
- 72. The combined maximum power density from the radio frequency emissions of the proposed antennas of Sprint, T-Mobile, and Cellco would be 32% of the standard for Maximum Permissible Exposure, as adopted by the FCC, at the base of the proposed tower. This calculation was based on a methodology prescribed by the FCC Office of Engineering and Technology Bulletin No. 65E, Edition 97-01 (August 1997) that assumes all antennas would be pointed at the base of the tower and all channels would be operating simultaneously. (Sprint 1, Tab 13; T-Mobile 1, A2; Cellco 1, Response 2)

#### Visibility

#### **Application Site**

- 73. Sprint's proposed flagpole tower would be visible on a year-round basis from approximately 37 acres within a two-mile radius of the tower's location. (Sprint 1, Tab 12: Visual Resource Evaluation Report)
- 74. The visibility of the proposed tower from different vantage points in the surrounding vicinity is summarized in the following table.

Location	<u>Visible</u>	Approx. Portion of (100') Tower Visible (ft.)	Approx. Distance and Direction to Tower
	Site		Site
1 – 17 Dora Drive	Yes	50'	1200 feet; S
2 – 24 South Dale Street	Yes	10'	1370 feet; SW
3 – 8 South Dale Street	Yes	50'	680 feet; SW
4 – Foxon Road at Planet Fitness	Yes	60'	530 feet; SW
5 - Foxon Road at Crest Avenue	Yes	40°	580 feet; SE
6 – 30 Thompson Street	Yes	10'	2500 feet; SW
7 - Foxon Road and Pleasant Street	Yes	5'	2800 feet; SW
8 – 19 Crest Avenue	Yes	40'	740 feet; SE
9 – end of Atlantic Court	Yes	60'	400 feet; NE
10 – 92 Strong Street	Yes	10'	530 feet; N
11 – 15 View Street	Yes	10'	630 feet; W
12 - Paul Avenue, south of Lucy Street	Yes	10'	1900 feet; SE
13 - Front Street, north of Lombard Street	Yes	10'	7800 feet; NE

(Sprint 1, Tab 12: Visual Resource Evaluation Report)

- 75. The flagpole tower would be seasonally visible from an additional 27 acres within in the same two-mile radius area. (Sprint 1, Tab 12: Visual Resource Evaluation Report)
- 76. The tower would be at least partially visible year-round for an estimated 34 residences located within 0.25 mile of the site. (Sprint 1, Tab 12: Visual Resource Evaluation Report)
- 77. The tower would be seasonally visible from an additional 18 residences in the surrounding area. (Sprint 2, Response 25)

#### Alternate Site

- 78. If the flagpole tower were to be located in the front of the building, the lower 35 to 45 feet of the tower would be shielded from the view of the nearest residential neighbors southeast of the building. (Tr. 2, pp. 22-23)
- 79. Locating the flagpole tower in the front of the building would not substantially impact the tower's visibility to the north. (Tr. 2, p. 23)

#### **Existing and Proposed Wireless Coverage**

(No material difference in coverage from either location on the site is expected for any of the participating carriers.)

#### **Sprint**

- 80. Sprint's wireless system utilizes two distinct technologies: Code Division Multiple Access (CDMA) and Integrated Digital Enhanced Network (iDEN). The proposed facility would only be part of Sprint's CDMA system. (Sprint 1, p. 7; Tr. 1, p. 24)
- 81. Sprint is licensed to operate the frequencies listed below for its CDMA network:

Transmit frequencies: 1950 – 1965 MHz Receive frequencies: 1870 – 1885 MHz

(Sprint 2, Response 21)

- 82. Sprint's minimum acceptable signal level for in-vehicle coverage is -92 dBm. For inbuilding coverage, it is -87 dBm. (Sprint 1, p. 13)
- 83. Sprint's existing signal strength in the vicinity of the proposed tower is below -92 dBm. (Sprint 1, p. 13)
- 84. The minimum antenna centerline height required for Sprint to achieve its coverage objectives from this site is 97 feet. (Sprint 1, p. 13)
- 85. Sprint currently has a half mile coverage gap on Route 80. (Sprint 2, Response 19)
- 86. Sprint's facility would cover approximately 1.8 miles along Route 80. (Sprint 2, Response 20)

- 87. Sprint's antennas would cover a total area of 4.5 square miles from the proposed location. (Sprint 2, Response 22)
- 88. Sprint's antennas at this location would hand off signals to the following, adjacent sites:

Location	Structure Type and Antenna Ht.	Approximate Distance from Site
150 Foxon Road, North Branford	177 feet on 180- foot monopole	2.2 miles
120 Universal Drive, North Haven	98 feet on 120-foot monopole	1.7 miles
315 Peck Street, New Haven	68 feet on smokestack	2.2 miles
355 Ferry Street, New Haven	96 feet on rooftop	2.0 miles
389 Forbes Avenue, New Haven	70 feet on 70-foot monopole	2.8 miles
65 Messina Drive, East Haven	103 feet on rooftop	2.9 miles

(Sprint 2, Response 14)

- 89. Sprint seeks to provide a P.02 grade of service, which means that ninety-eight percent of peak hour calls can be successfully placed. (Sprint 1, p. 14)
- 90. Test drive data and analysis of call statistics and propagation models indicate that Sprint's level of service in the area that would be covered by this site is currently worse than P.02. (Sprint 1, p. 6)
- 91. Sprint conducted a drive test of AT&T's frequencies from the AT&T facility on the Planet Fitness property. Sprint measured signal strength along Route 80 and determined the coverage to be within the immediate area. The signal strength diminished as one traveled further north or south of the site. (Tr. 1, pp. 19, 50)
- 92. Based on Sprint's drive test of AT&T's frequencies, all three carriers determined that use of the existing building at approximately 30 feet would not provide their desired coverage. Tr. 1, pp. 19, 50, and 68)

#### T-Mobile

93. T-Mobile's licensed frequencies in New Haven County are:

Upper 2/3 A Band Channels 536 to 588

Transmit: 1935.00 MHz to 1945.00 MHz Receive: 1855.00 MHz to 1865.00 MHz

C Band (C4)

Channels 762 to 785

Transmit: 1980.20 MHz to 1984.80 MHz Receive: 1900.20 MHz to 186580 MHz

(T-Mobile 1, A1)

- 94. T-Mobile's coverage objective from this location is to connect existing coverage to the west from a site at the intersection of I-91 and Route 80 to existing coverage from an on-air site located on Route 80 east of the proposed facility. Coverage would be added to the top part of Route 100 at the junction of Route 80 and secondary roads and residences in the immediate surrounding vicinity. (T-Mobile 1, A5)
- 95. T-Mobile's minimum design signal strength is -84 dBm for in-vehicle coverage and -76 dBm for in-building coverage. (T-Mobile 2, Q.5 Answer)
- 96. T-Mobile's existing signal strength in the area that it would cover from this facility ranges from -85 dBm to -97 dBm. (T-Mobile 1, A4)
- 97. T-Mobile has an existing coverage gap of 1.39 miles on Route 80. (T-Mobile 1, A6)
- 98. T-Mobile's antennas would cover 2.9 miles along Route 80. This distance would allow adequate overlap for hand off completion. (T-Mobile 1, A7)
- 99. T-Mobile's antennas would cover a total area of 6.488 square miles from the proposed facility. (T-Mobile 1, A8)
- 100. From the proposed facility, T-Mobile's antennas would hand off signals to the adjacent sites identified below:

Site Address	Type of Facility	Height of Antennas (agl)
159 Middletown Avenue	Billboard	95 feet
New Haven		
108 Foxon Road	Monopole	147 feet
North Branford	-	

(T-Mobile 1, A9)

#### Cellco

101. Cellco's licensed frequencies in New Haven County are:

Cellular band – 869-880 MHz PCS F Block – 1970-1975 MHz PCS C3 Block 1975-1980 MHz

(Cellco 1, Response 1)

- 102. The cellular band provides voice service while the PCS band provides data service based on its higher speed of transmission. PCS voice service is used when needed in high demand and capacity-challenged areas and adjacent to Litchfield County where Cellco only operates PCS frequencies for voice service. (Tr. 1, p.63)
- 103. Cellco designs its wireless system for a minimum signal strength of -85 dBm. (Cellco 1, Response 3)
- 104. Cellco's existing signal strength in the area that would be covered from this facility ranges from -86 dBm to -105 dBm. (Cellco 1, Response 4)
- 105. Cellco's objective in placing antennas on this facility would be to provide coverage along Route 80 as well as local roads in the northerly portion of East Haven. (Cellco 1, Response 5)
- 106. Cellco currently experiences coverage gaps of approximately 2.8 miles at PCS frequencies and approximately 2.3 miles at cellular frequencies along Route 80. (Cellco 1, Response 6)
- 107. Cellco's antennas at this location would cover an approximately 1.7 mile portion of Route 80 at PCS frequencies and an approximately 2.3 mile portion of Route 80 at cellular frequencies. (Cellco 1, Response 7)
- 108. From the proposed facility, Cellco's antennas would hand off signals to the adjacent sites identified below:

Site Address	Type of Facility	Height of Antennas
315 Peck Street	Smokestack	68 feet
New Haven		
65 Messina Drive	Rooftop	100 feet
East Haven		
405 Brushy Hill Road	Monopole	130 feet
Branford	-	

(Cellco 1, Response 9)

- 109. At PCS frequencies, Cellco would have coverage gaps to the east and west of the proposed site along Route 80. To complete seamless coverage on Route 80, Cellco has identified existing potential sites: one site to the east (an existing Connecticut Light &Power Company transmission tower), and one site to the west consisting of a 100-foot tower. (Tr. 1, pp. 53-54 and 60)
- 110. Cellco's antennas at this location would cover a total area of approximately 3.5 square miles at PCS frequencies and approximately 6.2 square miles at cellular frequencies. (Cellco 1, Response 8)

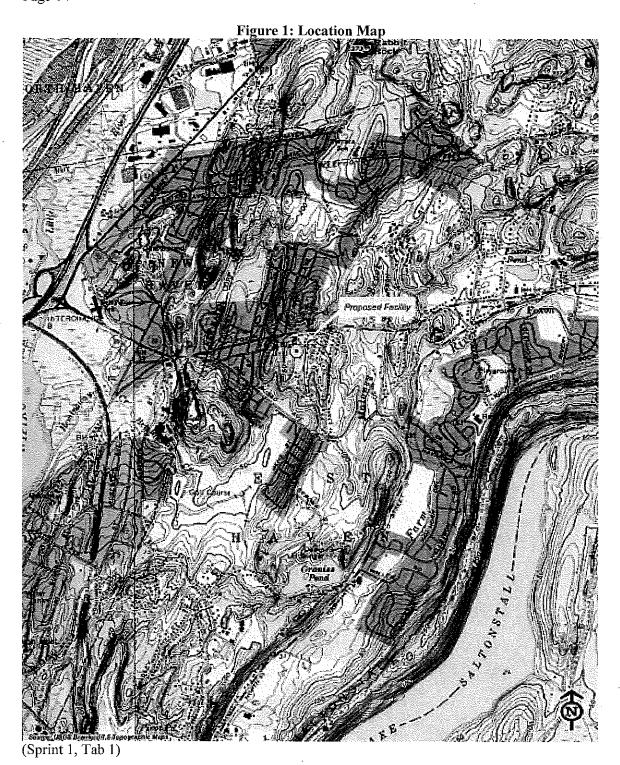
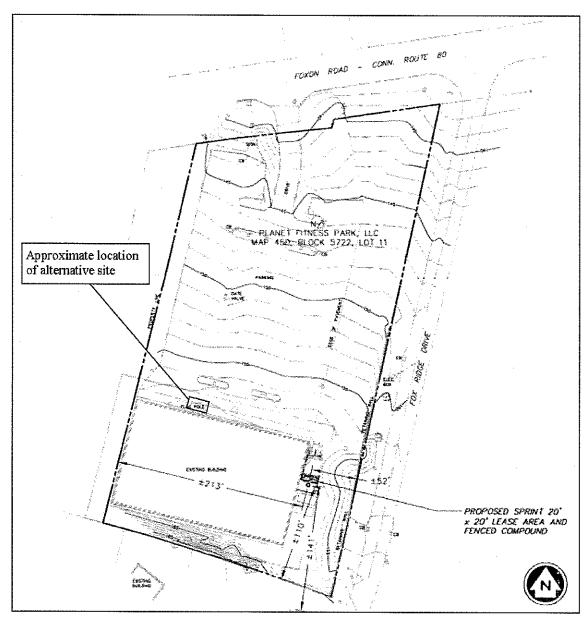
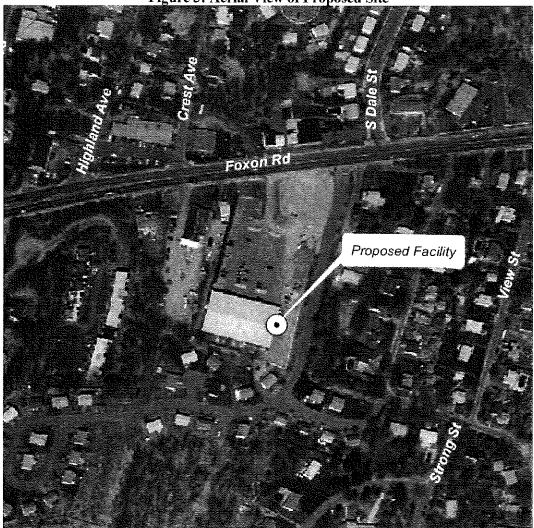


Figure 2: Proposed Site Plan



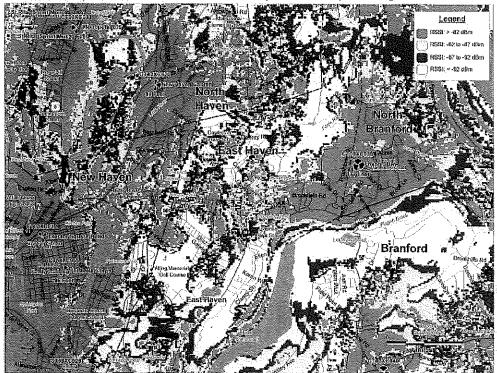
(Sprint 1, Tab 8, Drawing Z2)

Figure 3: Aerial View of Proposed Site



(Sprint 1, Tab 1)

Figure 4: Sprint's Existing Coverage in Vicinity of Proposed Site



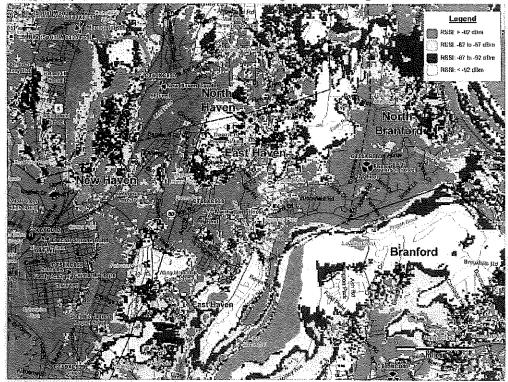
(Sprint 1, Tab 10)

North North Branford Branford

Figure 5: Sprint's Coverage from Proposed Site

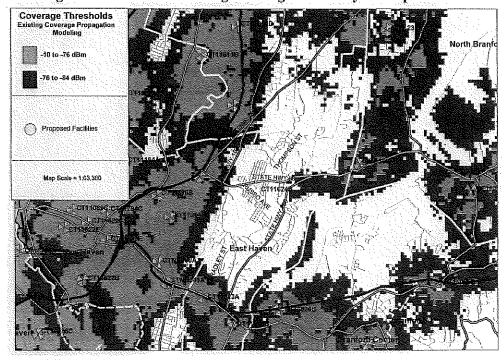
(Sprint 1, Tab 10)

Figure 6: Sprint's Composite Coverage



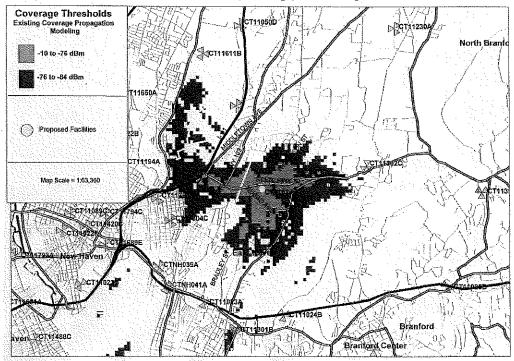
(Sprint 1, Tab 10)

Figure 7: T-Mobile's Existing Coverage in Vicinity of Proposed Site



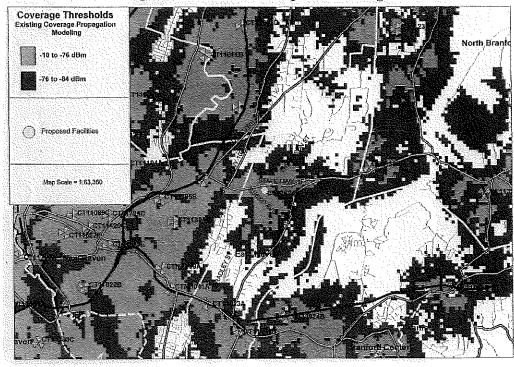
(T-Mobile 1, Tab 1)

Figure 8: T-Mobile's Coverage from Proposed Site



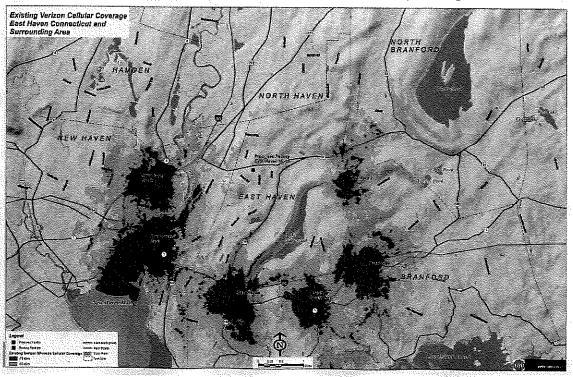
(T-Mobile 1, Tab 1)

Figure 9: T-Mobile's Composite Coverage



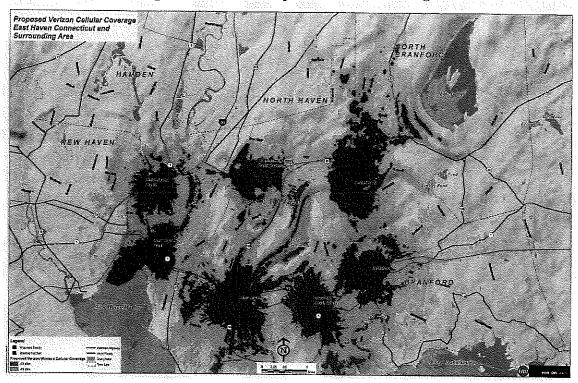
(T-Mobile 1, Tab 1)

Figure 10: Cellco's Existing Cellular Coverage in Vicinity of Proposed Site



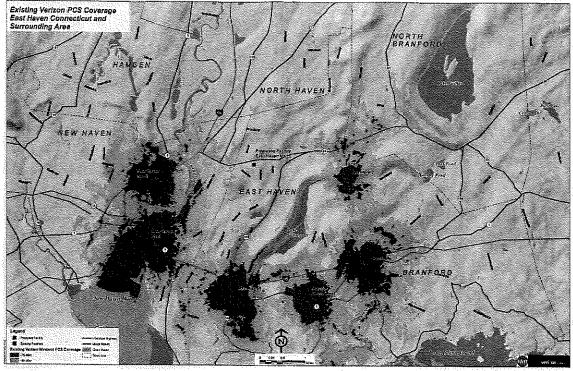
(Cellco 1)

Figure 11: Cellco Composite Cellular Coverage



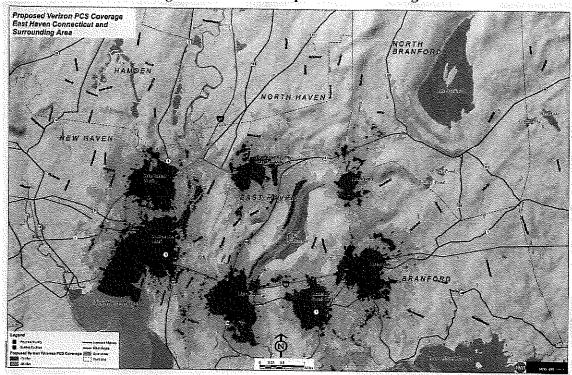
(Cellco 1)

Figure 12: Cellco's Existing PCS Coverage in Vicinity of Proposed Site

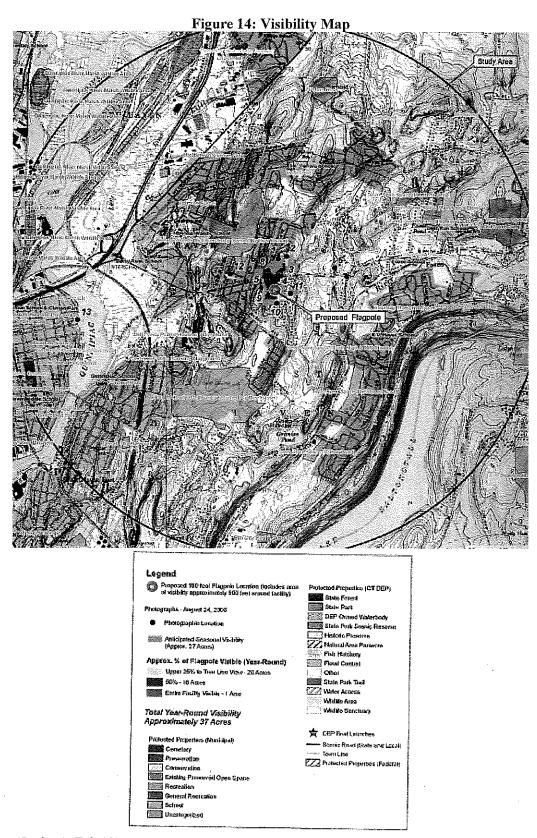


(Cellco 1)

Figure 13: Cellco Composite PCS Coverage



(Cellco 1)



(Sprint 1, Tab 12)

#### Opinion

On March 27, 2007, Sprint Nextel Corporation (Sprint) applied to the Connecticut Siting Council (Council) for the issuance of a Certificate of Environmental Compatibility and Public Need (Certificate) for the construction, maintenance and operation of a wireless telecommunications facility at 836 Foxon Road in East Haven, Connecticut. The applicant seeks to develop a facility on a 3-acre parcel owned by Planet Fitness Park, LLC. This location would enable Sprint to cover a gap in Sprint's wireless service along Foxon Road (Route 80) and in the surrounding area of East Haven and to provide capacity relief for Sprint's existing sites in this area. Cellco Partnership d/b/a Verizon Wireless (Cellco) and Omnipoint Communications, Inc. (T-Mobile) participated in this proceeding as intervenors. Both of these companies sought to place antennas on the proposed facility.

On this property, on which a fitness club is located, Sprint proposed erecting a 100-foot flagpole tower within a 20-foot by 20-foot fenced equipment compound. The tower and compound were to be located on the east side of the fitness club building, adjacent to an existing AT&T compound, within which is located the ground equipment for AT&T antennas mounted on the roof of the fitness club building. The other intervening carriers were to negotiate with the landowner for separate, additional parcels, within which they could locate their ground equipment. These parcels were also to be located on the east side of the building, near Sprint's compound. However, a new overhead door recently installed on the east side of the building presented a complication for locating the intervening carriers' equipment compounds.

Sprint's tower would be designed to accommodate four antenna placements. Utilities would be extended from an existing transformer north of AT&T's compound and would run through AT&T's compound to Sprint's compound. Vehicular access would be over the existing driveways and paved parking areas.

In its originally proposed location, the tower's setback radius would encroach by approximately 50 feet on property to the east, which is the small strip of land between the Planet Fitness Park property and Fox Ridge Drive owned by Nutmeg Housing Development. The setback radius of a tower at the alternate site in the front of the building would encroach by approximately 20 feet on the adjacent property to the west. Sprint expressed its willingness to design a yield point into the tower to avoid encroaching on neighboring properties.

Docket 331: East Haven Opinion Page 2

In addition to being visible along Route 80 in the vicinity of the Planet Fitness building, the proposed tower would be visible year-round from approximately 37 acres within a two-mile radius of the site and would be seasonally visible from approximately an additional 27 acres. Approximately 34 residences would have partial year-round views of the tower; 18 additional residences would have seasonal views of the tower. Sprint's concern over the potential visibility of its tower in an area with dense residential development led it to choose a flagpole design.

Because the proposed site is located on a property that is mostly paved, no vegetation would be removed to develop Sprint's facility. The closest wetlands to the proposed site are approximately 1,500 feet to the northwest and 1,500 feet due south.

No known extant populations of Federal or State Endangered, Threatened or Special Concern Species occur near Sprint's proposed facility.

The proposed facility would have no effect on historic, architectural, or archaeological resources listed on or eligible for the National Register of Historic Places. The facility would also have no effect on properties of traditional cultural importance to Connecticut's Native American community.

During the public hearing, Sprint stated that it would consider locating its proposed tower in the front of the fitness building where an existing flagpole is located. Sprint reported that the property owner would be amenable to this change in location. Ground equipment for the different carriers could be installed behind the building and cables could be run over the building to connect the ground equipment with the antennas. As an alternate, the ground equipment could be placed in the front of the building, next to the tower. Locating the tower in the front of the building would make the tower less visible to its nearest residential neighbors who live at the southeast corner of the fitness club property. The carriers' coverage would be comparable at either location, and the overall visibility would be similar.

According to a methodology prescribed by the FCC Office of Engineering and Technology Bulletin No. 65E, Edition 97-01 (August 1997), the combined radio frequency power density levels of the antennas proposed to be installed on the tower have been calculated to amount to approximately 32% of the FCC's Maximum Permissible Exposure, as measured at the base of the tower. This percentage is well below federal and state standards established for the frequencies used by wireless companies. If federal or state standards change, the Council will require that the tower be brought into compliance with such standards. The Council will require that the power densities be recalculated in the event other carriers add antennas to the tower. The Telecommunications Act of 1996 prohibits any state or local agency from regulating telecommunications towers on the basis of the environmental effects of radio frequency emissions to the extent that such towers and equipment comply with FCC's regulations concerning such emissions.

The Council feels that moving the proposed tower to the alternate site—the current location of the existing flagpole—is preferable to the site on the east side of the fitness club building that was originally proposed. Use of the alternate site would eliminate potential problems that could have arisen when trucks had to back up to the new overhead door between tightly located equipment compounds. It would also provide some visibility relief for the nearest neighbors, several of whom would have had an unimpeded view of the tower and its associated compounds. Putting its

Docket 331: East Haven Opinion Page 3

tower in the alternate location would also enable Sprint to fly a flag from the tower. Originally, Sprint would not have flown a flag from its tower since there was already another flagpole on the same property. While final details of the location of equipment compounds are still to be developed, the Council suggests that the ground equipment could be housed in a single, architecturally-treated building designed to blend in with the existing fitness club building.

Based on the record in this proceeding, the Council finds that the effects associated with the construction, operation, and maintenance of the proposed telecommunications facility, including effects on the natural environment; ecological integrity and balance; public health and safety; scenic, historic, and recreational values; forests and parks; air and water purity; and fish and wildlife are not disproportionate either alone or cumulatively with other effects when compared to need, are not in conflict with policies of the State concerning such effects, and are not sufficient reason to deny this application. Therefore, the Council will issue a Certificate for the construction, operation, and maintenance of a telecommunications facility, which would include a 100-foot monopole tower designed as a flagpole, at the alternate site in front of the fitness club building at 836 Foxon Road in East Haven, Connecticut. Furthermore, the Council directs the applicant to locate its ground equipment and the ground equipment for any other carriers who would use this tower in one compound to be located in the rear of the fitness club building or adjacent to the tower.

<b>DOCKET NO. 331</b> - Sprint Nextel Corporation application for a	}	Connecticut
Certificate of Environmental Compatibility and Public Need for	•	
the construction, maintenance and operation of a	}	Siting
telecommunications facility located at 836 Foxon Road, East		· -
Haven, Connecticut.	}	Council
		November 5, 2007

# Decision and Order

Pursuant to the foregoing Findings of Fact and Opinion, the Connecticut Siting Council (Council) finds that the effects associated with the construction, operation, and maintenance of a telecommunications facility including effects on the natural environment; ecological integrity and balance; public health and safety; scenic, historic, and recreational values; forests and parks; air and water purity; and fish and wildlife are not disproportionate either alone or cumulatively with other effects when compared to need, are not in conflict with the policies of the State concerning such effects, and are not sufficient reason to deny the application and therefore directs that a Certificate of Environmental Compatibility and Pubic Need, as provided by General Statutes § 16-50k, be issued to Sprint Nextel Corporation for the construction, maintenance and operation of a wireless telecommunications facility to be located at 836 Foxon Road in East Haven, Connecticut.

The facility shall be constructed, operated, and maintained substantially as specified in the Council's record in this matter, and subject to the following conditions:

- 1. The tower shall be designed and constructed as a flagpole no taller than 100 feet above ground level to provide telecommunications services to both public and private entities.
- 2. The national flag shall be flown from the flagpole tower in conformity with customary protocol.
- 3. There shall be one equipment compound for all entities that install antennas on the tower.
- 4. The Certificate Holder shall prepare a Development and Management (D&M) Plan for this site in compliance with Sections 16-50j-75 through 16-50j-77 of the Regulations of Connecticut State Agencies. The D&M Plan shall be served on the Town of East Haven and all parties and intervenors, as listed in the service list, and submitted to and approved by the Council prior to the commencement of facility construction and shall include:
  - a) a final site plan(s) of site development to include specifications for the tower, tower foundation, antenna mountings, equipment building, access road, and utility line; and
  - b) construction plans for site clearing, water drainage, and erosion and sedimentation control consistent with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, as amended.

- 5. The Certificate Holder shall, prior to the commencement of operation, provide the Council worst-case modeling of the electromagnetic radio frequency power density of all proposed entities' antennas at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin No. 65, August 1997. The Certificate Holder shall ensure a recalculated report of the electromagnetic radio frequency power density be submitted to the Council in the event other carriers locate at this facility or if circumstances in operation cause a change in power density above the levels calculated and provided pursuant to this Decision and Order.
- 6. Upon the establishment of any new state or federal radio frequency standards applicable to frequencies of this facility, the facility granted herein shall be brought into compliance with such standards.
- 7. The Certificate Holder shall permit public or private entities to share space on the proposed tower for fair consideration, or shall provide any requesting entity with specific legal, technical, environmental, or economic reasons precluding such tower sharing.
- 8. The Certificate Holder shall provide reasonable space on the tower for no compensation for any Town of East Haven public safety services (police, fire and medical services), provided such use can be accommodated and is compatible with the structural integrity of the tower.
- 9. Unless otherwise approved by the Council, if the facility authorized herein is not fully constructed and providing wireless services within eighteen months from the date of the mailing of the Council's Findings of Fact, Opinion, and Decision and Order (collectively called "Final Decision"), this Decision and Order shall be void, and the Certificate Holder shall dismantle the tower and remove all associated equipment or reapply for any continued or new use to the Council before any such use is made. The time between the filing and resolution of any appeals of the Council's Final Decision shall not be counted in calculating this deadline.
- 10. Any request for extension of the time period referred to in Condition 8 shall be filed with the Council not later than 60 days prior to the expiration date of this Certificate and shall be served on all parties and intervenors, as listed in the service list, and the Town of East Haven. Any proposed modifications to this Decision and Order shall likewise be so served.
- 11. If the facility ceases to provide wireless services for a period of one year, this Decision and Order shall be void, and the Certificate Holder shall dismantle the tower and remove all associated equipment or reapply for any continued or new use to the Council before any such use is made.
- 12. The Certificate Holder shall remove any nonfunctioning antenna, and associated antenna mounting equipment, within 60 days of the date the antenna ceased to function.

Docket 331: East Haven Decision and Order Page 3

13. In accordance with Section 16-50j-77 of the Regulations of Connecticut State Agencies, the Certificate Holder shall provide the Council with written notice two weeks prior to the commencement of construction activities. In addition, the Certificate Holder shall provide the Council with written notice of the completion of site construction and the commencement of site operation.

Pursuant to General Statutes § 16-50p, we hereby direct that a copy of the Findings of Fact, Opinion, and Decision and Order be served on each person listed below, and notice of issuance shall be published in New Haven Register and the East Haven Courier.

By this Decision and Order, the Council disposes of the legal rights, duties, and privileges of each party named or admitted to the proceeding in accordance with Section 16-50j-17 of the Regulations of Connecticut State Agencies.

The parties and intervenors in this proceeding are:

	Status Holder Representative		
Status Granted	(name, address & phone number)	(name, address & phone number)	
Applicant	Sprint Nextel Corporation	Thomas J. Regan, Esq. Brown Rudnick Berlack Israels LLP CityPlace I, 38 <sup>th</sup> Floor 185 Asylum Street Hartford, CT 06103-3402 (860) 509-6522 (860) 509-6501 fax tregan@brownrudnick.com	
Intervenor (granted on May 22, 2007)	Cellco Partnership d/b/a Verizon Wireless ("Cellco")	Kenneth C. Baldwin, Esq. Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103-3597 (860) 275-8200	
Intervenor (granted on June 7, 2007)	Omnipoint Communications, Inc. (T-Mobile)	Julie D. Kohler, Esq. Carrie L. Larson, Esq. Cohen and Wolf, P.C. 1115 Broad Street Bridgeport, CT 06604 (203)368-0211	

#### **CERTIFICATION**

The undersigned members of the Connecticut Siting Council (Council) hereby certify that they have heard this case, or read the record thereof, in **DOCKET NO. 331** - Sprint Nextel Corporation application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and operation of a telecommunications facility located at 836 Foxon Road, East Haven, Connecticut, and voted as follows to approve the proposed site, located at 836 Foxon Road, East Haven, Connecticut:

Council Members	Vote Cast
Daniel F. Caruso, Chairman	Yes
Colin C. Tait, Vice Chairman	Absent
Commissioner Donald W. Downes Designee: Gerald J. Heffernan	Yes
Commissioner Gina McCarthy Designee: Brian J. Emerick	Yes
Philip T. Ashton	Yes
Daniel P. Lynch, Jr.	Yes
James J. Murphy, Ir.	Yes
Barbara Currier Bell Dr. Barbara Currier Bell	Yes
Edward S. Wilensky	Yes

Dated at New Britain, Connecticut, November 5, 2007.

STATE OF CONNECTICUT	)
ss. New Britain, Connecticut	:
COUNTY OF HARTFORD	)

I hereby certify that the foregoing is a true and correct copy of the Findings of Fact, Opinion, and Decision and Order issued by the Connecticut Siting Council, State of Connecticut.

S. Derek Phelps
Executive Director
Connecticut Siting Council

I certify that a copy of the Findings of Fact, Opinion, and Decision and Order in Docket No. 331 has been forwarded by Certified First Class Return Receipt Requested mail on November 7, 2007, to all parties and intervenors of record as listed on the attached service list, dated June 8, 2007.

ATTEST:

Carriann Mulcahy
Secretary I
Connecticut Siting Council

Docket No. 331 Page 1 of 1

# LIST OF PARTIES AND INTERVENORS $\underline{\text{SERVICE LIST}}$

	Status Holder	Representative
Status Granted	(name, address & phone number)	(name, address & phone number)
Applicant	Sprint Nextel Corporation	Thomas J. Regan, Esq. Brown Rudnick Berlack Israels LLP CityPlace I, 38 <sup>th</sup> Floor 185 Asylum Street Hartford, CT 06103-3402 (860) 509-6522 (860) 509-6501 fax tregan@brownrudnick.com
Intervenor (granted on May 22, 2007)	Cellco Partnership d/b/a Verizon Wireless ("Cellco")	Kenneth C. Baldwin, Esq. Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103-3597 (860) 275-8200
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#### CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051 Phone: (860) 827-2935 Fax: (860) 827-2950 E-Mail: siting.council@ct.gov Internet: ct.gov/csc

November 7, 2007

TO:

Classified/Legal Supervisor

331071107

The New Haven Register

40 Sargent Drive

New Haven, CT 06511

Classified/Legal Supervisor

331071107

East Haven Courier/Shore Publishing

P.O. Box 1010 Madison, CT 06443

FROM:

Carriann Mulcahy, Secretary

RE:

**DOCKET NO. 331** - Sprint Nextel Corporation application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and operation of a telecommunications facility located at 836 Foxon Road, East

Haven, Connecticut.

Please publish the attached notice as soon as possible, but not on Saturday, Sunday, or a holiday.

Please send an affidavit of publication and invoice to my attention.

Thank you.

CM





#### CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051 Phone: (860) 827-2935 Fax: (860) 827-2950 E-Mail: siting.council@ct.gov Internet: ct.gov/csc

#### NOTICE

Pursuant to General Statutes § 16-50p (d), the Connecticut Siting Council (Council) announces that, on November 5, 2007, the Council issued Findings of Fact, an Opinion, and a Decision and Order approving an application from Sprint Nextel Corporation for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and operation of a telecommunications facility located at 836 Foxon Road, East Haven, Connecticut. This application record is available for public inspection in the Council's office, Ten Franklin Square, New Britain, Connecticut

